

# CogAT: the levels by grade, the nine subtests, and how it is scored

The Cognitive Abilities Test (Riverside Insights, Forms 7 and 8, equivalent forms) measures reasoning, not curriculum, in three batteries. Schools use it to identify children for gifted programmes, to spot multilingual learners whose reasoning is strong, and to adapt teaching. Most districts test in grades 2 to 5.

| Level | 5/6 | 7 | 8 | 9 | 10 | 11 | 12 | 13/14 | 15/16 | 17/18 |
|-------|-----|---|---|---|----|----|----|-------|-------|-------|
| Grade | K   | 1 | 2 | 3 | 4  | 5  | 6  | 7-8   | 9-10  | 11-12 |

The level number is the typical age. Levels 5/6 to 8 use pictures with the directions read aloud (English or Spanish), so no reading is needed; from Level 9 the verbal battery uses words and the sections are timed. Roughly two hours at the primary levels (in sessions), about 90 minutes from Level 9.

| Battery      | Subtest                         | The task (primary form in brackets)                    |
|--------------|---------------------------------|--------------------------------------------------------|
| Verbal       | verbal (picture) analogies      | big is to small as hot is to ?                         |
|              | sentence completion             | the word or picture that best finishes a sentence      |
|              | verbal (picture) classification | three things that belong together; pick the fourth     |
| Quantitative | number analogies                | 2 is to 4 as 5 is to ?                                 |
|              | number puzzles                  | make the sides balance: $4 = 2 + ?$                    |
|              | number series                   | continue the pattern: 2, 4, 6, ?                       |
| Nonverbal    | figure matrices                 | the shape that completes a 2 x 2 pattern               |
|              | paper folding                   | a folded, punched paper: which unfolded sheet matches? |
|              | figure classification           | three shapes that belong together; pick the fourth     |

The Screening Form is one analogies subtest from each battery, giving a single score for universal screening; its cut-off should be more generous than the full test's. Each battery scores separately and the three combine into a composite (VQN).

## The scoring chain

[ ] Raw score: items right per subtest, added per battery

[ ] Universal Scale Score (USS): one scale across all levels, so growth can be tracked year to year

[ ] Standard Age Score (SAS): the USS against children of the same age (one-month groups); mean 100, standard deviation 16, range 50-160

[ ] Percentile rank and stanine (1-9), by age and by grade; stanines 1-3 below average, 4-6 average, 7-8 above average, 9 very high

[ ] Ability profile: median stanine + pattern letter (A all alike 44%; B one battery differs 33%; C a strength and a weakness 12%; E two batteries 24+ SAS points apart 10%) + the battery, e.g. 7B (Q+)

From

sciencewithshobha.com/blog/cogat-test-what-it-is-the-levels-by-grade-the-three-batteries-and-nine-subtests-how-it-is-scored-sas-stanine-percentile-and-ability-profile-what-score-is-gifted-and-how-to-prepare/ · 1-on-1 online SAT, ACT, PSAT and school subjects, US after-school hours, free 30-minute first class.

# SAS to percentile and stanine, what counts as gifted, and how to prepare

## From Riverside's 2017 norms guide, Table 37 (abridged)

| SAS  | Pct | Stanine | SAS | Pct | Stanine | SAS          | Pct | Stanine |
|------|-----|---------|-----|-----|---------|--------------|-----|---------|
| 136+ | 99  | 9       | 119 | 88  | 7       | 94           | 35  | 4       |
| 132  | 98  | 9       | 116 | 84  | 7       | 91           | 29  | 4       |
| 130  | 97  | 9       | 112 | 77  | 7       | 88           | 23  | 3       |
| 128  | 96  | 9       | 108 | 69  | 6       | 84           | 16  | 3       |
| 127  | 95  | 8       | 104 | 60  | 6       | 80           | 11  | 2       |
| 125  | 94  | 8       | 100 | 50  | 5       | 76           | 7   | 2       |
| 123  | 92  | 8       | 97  | 43  | 5       | 72           | 4   | 1       |
| 120  | 89  | 8       |     |     |         | 64 and below | 1   | 1       |

Stanine shares: 4% in 9, 7% in 8, 12% in 7, 17% in 6, 20% in 5, 17% in 4, 12% in 3, 7% in 2, 4% in 1. The 95th percentile is an SAS of about 127, the 97th about 130, the 98th about 132.

## What districts treat as gifted (each sets its own policy)

|                      |                                                                                                             |
|----------------------|-------------------------------------------------------------------------------------------------------------|
| Composite percentile | 95th, 96th or 97th and above (SAS about 127-130)                                                            |
| Any one battery      | 97th or 98th percentile (SAS 130 or 132), to catch one strong domain                                        |
| Stanine              | 8 or 9                                                                                                      |
| With achievement     | CogAT above a cut-off and Iowa Assessments above another; or a matrix with teacher ratings and work samples |
| Local norms          | the top 5 or 10% of the district's own testers                                                              |
| English learners     | often the nonverbal battery alone; near misses usually retested on the other form                           |

## How to prepare a child

- [ ] Riverside's free practice activities, so the formats (analogies, series, matrices, paper folding) are familiar: the preparation that matters
- [ ] Reasoning grows through play: pattern blocks, tangrams, sorting games, number talks, riddles, reading aloud with why-questions
- [ ] Sleep and a calm morning over a last practice set
- [ ] Do not drill bought test banks for weeks: a drilled score tells the school less, and a child placed on it can struggle in the programme

## Your child's report

Level and form: \_\_\_\_\_

Verbal SAS / percentile / stanine: \_\_\_\_\_

Quantitative SAS / percentile / stanine: \_\_\_\_\_

Nonverbal SAS / percentile / stanine: \_\_\_\_\_

Composite SAS / percentile / stanine: \_\_\_\_\_

Ability profile: \_\_\_\_\_

District cut-off: \_\_\_\_\_